



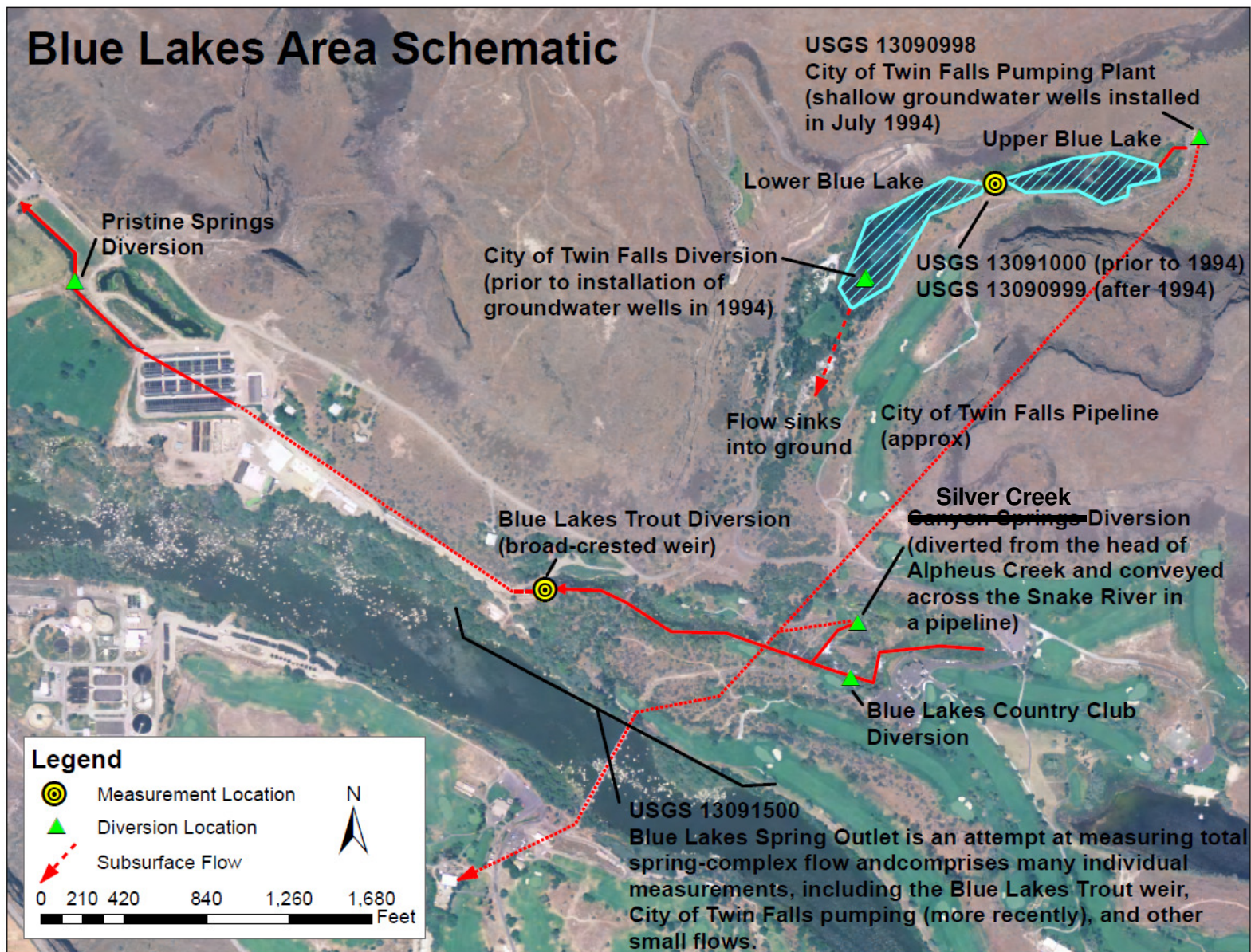
Blue Lakes Spring Complex

Presented by Jennifer Cuhaciyan, Staff Hydrologist

3/14/2011



Blue Lakes Area Schematic



Blue Lakes Gage



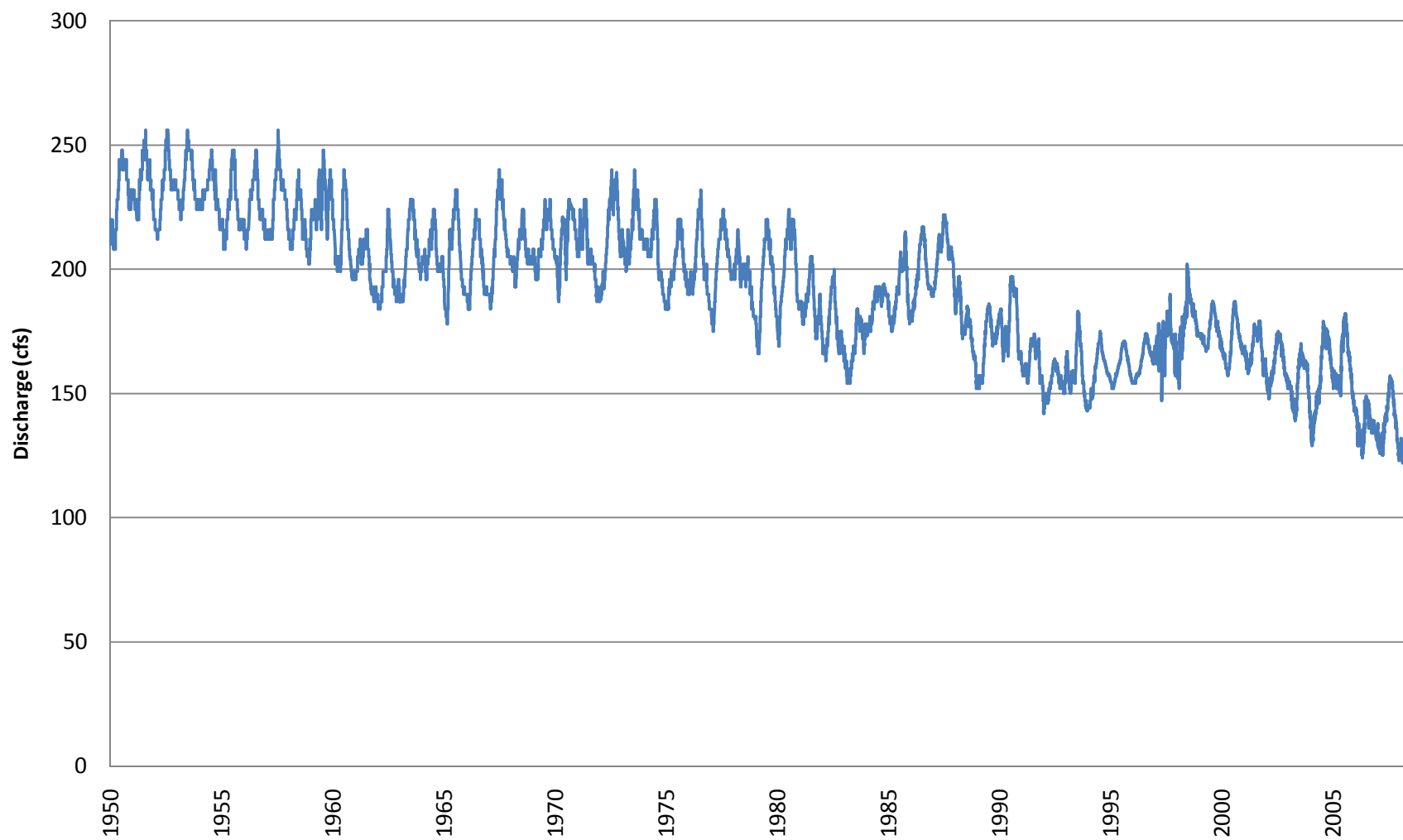
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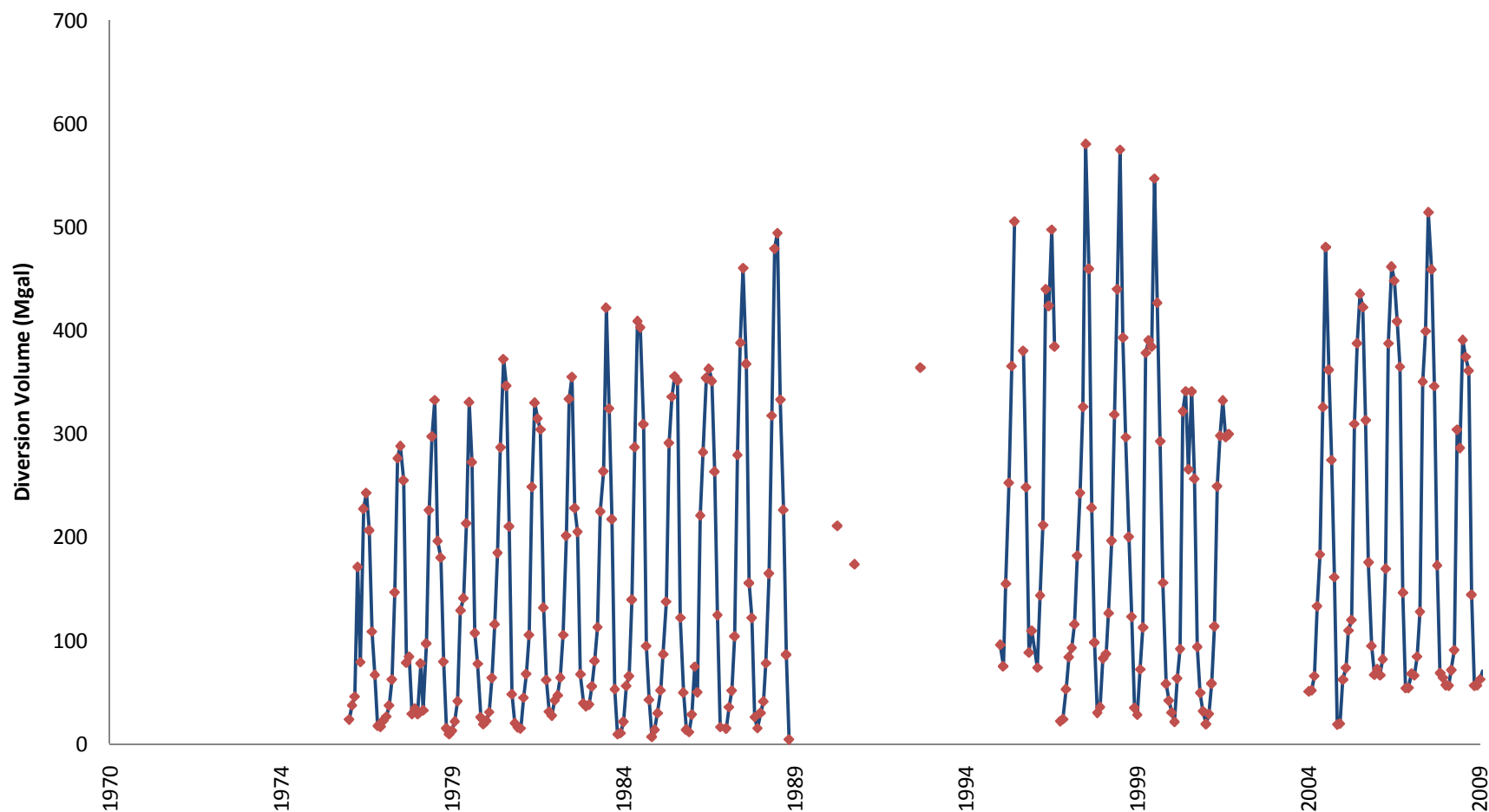
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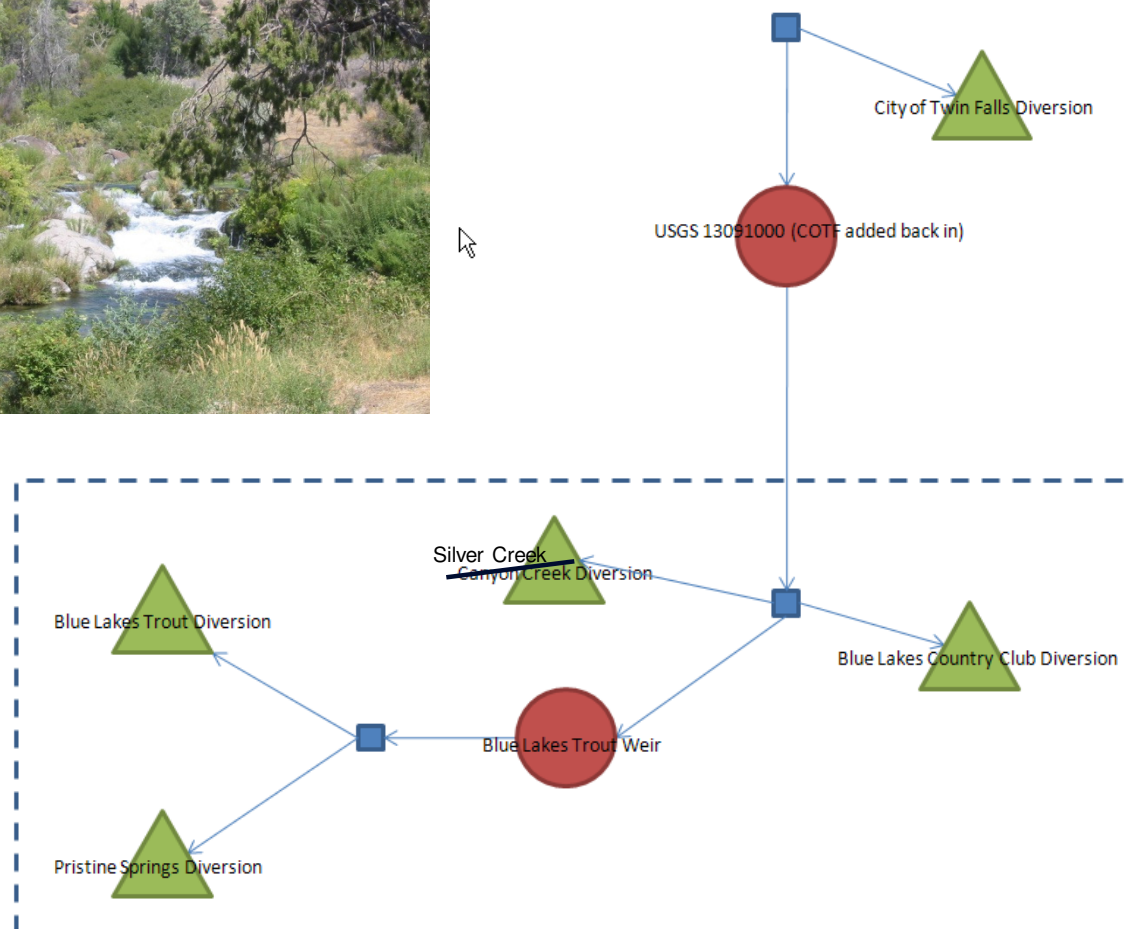
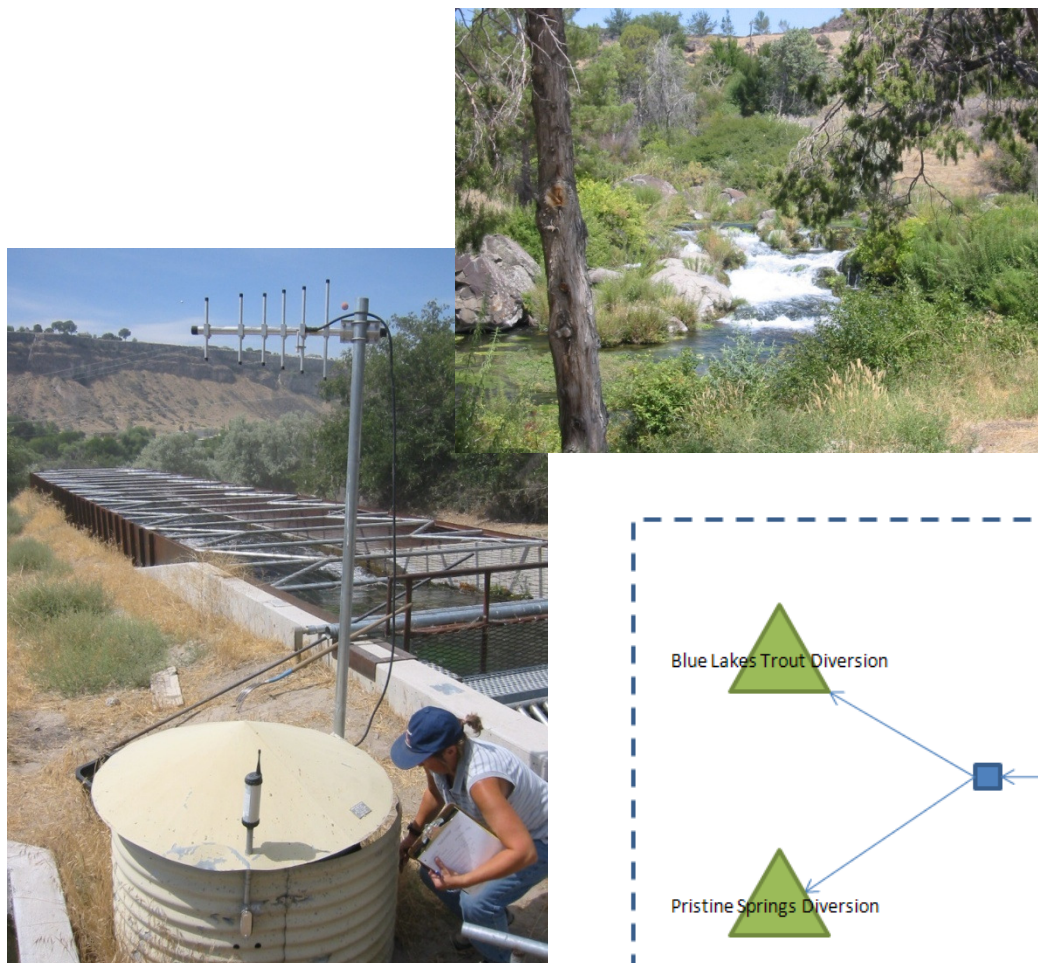
USGS 13091000



COTF Monthly Diversion Volume




Alpheus Creek




Alpheus Creek

- **Blue Lakes Country Club:**
 - *Measured at a pump on Alpheus Creek.*
 - *Monthly volume is reported however BLCC monitors the rate daily.*
 - *BLCC pumps only at night (0.5 to 1 cfs)*
 - *“Rotation agreement” with other parties on Alpheus Creek allows them to pump higher than their water right rate.*
- **Silver Creek:**
 - *Headgate on Alpheus Creek diverts water into a pipe that crosses the Snake River.*
 - *Flow is measured by an insertable flow meter in the pipe. Silver Creek monitors the rate weekly and Cindy Yenter monitors it monthly.*
 - *Usually only in priority during the winter months and diverts at a maximum of 6 cfs.*
- **Blue Lakes Trout Weir:**
 - *Broad-crested weir maintained by Blue Lakes Trout*
 - *BLT monitors the rate daily and reports weekly. Cindy Yenter checks the flow atleast once per month.*

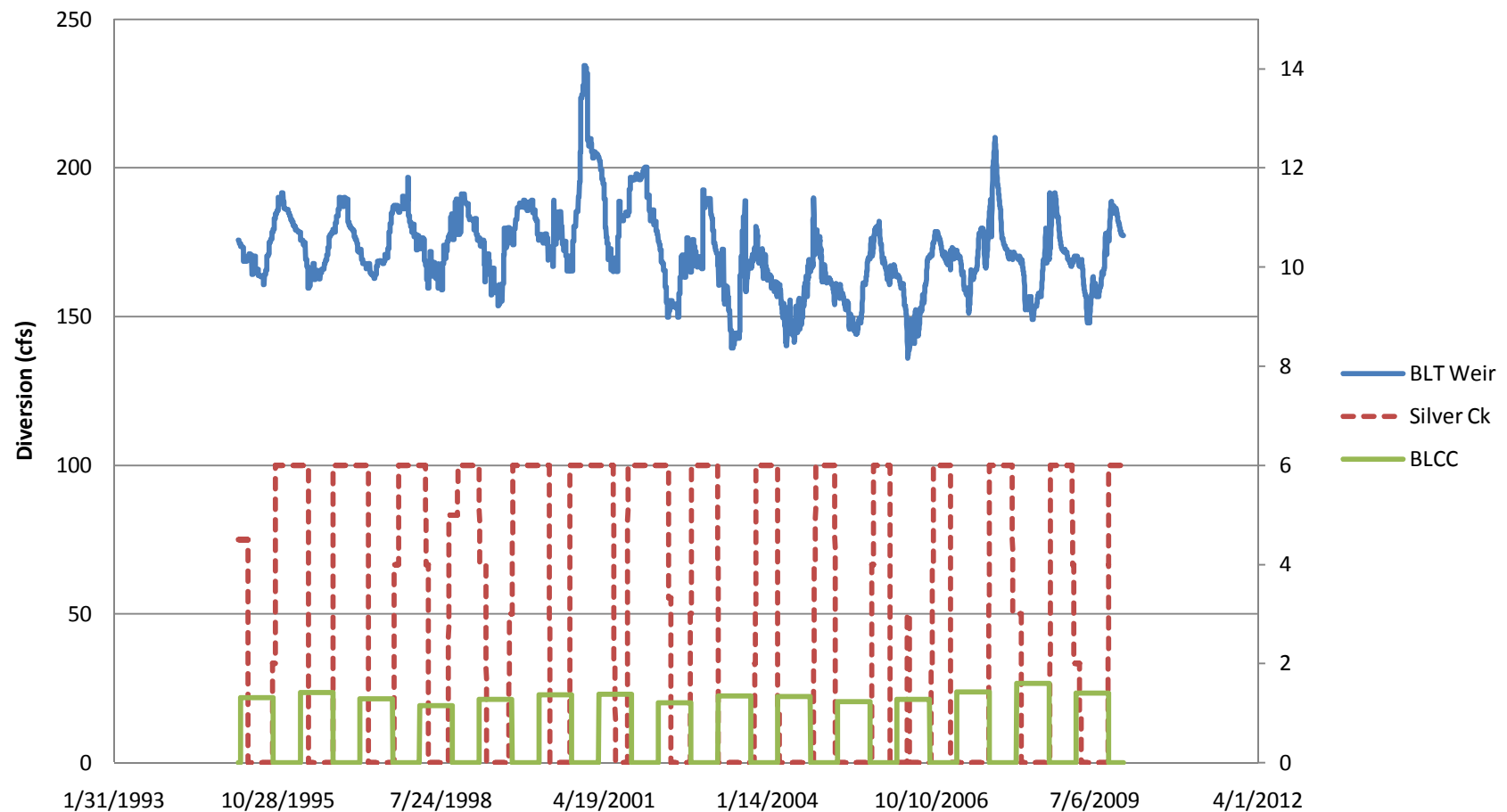
Weir Maintenance

- Severe mossing going back to '05 or '06
 - Before cleaning:
 - Weir measured 165 cfs
 - ADCP measurement of 137 cfs

21% difference
 - After cleaning:
 - Weir measured 131 cfs
 - ADCP measurement of 125 cfs

5% difference
- Submergence
 - At very low flows
 - When hatchery checks up the water above their raceways to improve water quality
- Cindy Yenter is actively helping BLT improve their management of the weir

Alpheus Creek Diversions



Data Availability

- **13091000**
 - 4/1/1950 to current (daily)
- **COTF**
 - 11/30/1995 to current (daily)
 - Jan 1977 to current (monthly)
- **BLCC, Silver Ck, and BLT weir**
 - 3/1/1995 to current (daily estimates)
 - based on Cindy Yenter's knowledge of the diversions and weekly/monthly reported values

COTF Diversion Considerations

- Pump tests have revealed an 8 hour response time between the COTF pumps and the BLT weir
- Cindy estimates that the COTF can pump up to 20 cfs without influencing flows at the weir.

